

# A Word from the



B-52 returning from  
Afghanistan.

1<sup>st</sup> Combat Camera Squadron (Cadric H. Rudisil)

# Chairman

In the last issue of *Joint Force Quarterly*, I outlined my three top priorities as Chairman—winning the global war on terrorism, improving joint warfighting capabilities, and transforming the Armed Forces. In this issue, I want to discuss in more detail my thoughts on transformation, the third priority.

Transformation has become one of the hottest topics inside the Beltway—and with good reason. Highlighting the urgent need to protect America from terrorism, President Bush, speaking at the Citadel last December, declared that his

first priority was accelerating transformation. With the President setting the goal, Secretary Rumsfeld is aggressively taking action to change the Department of Defense on many fronts, from revamping military strategy to streamlining the planning, programming, and budgeting system and adopting better business practices.

The area of transformation that I am most concerned about is *military* transformation, a much narrower slice of the larger DOD effort. During testimony before the House and Senate

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## A WORD FROM THE CHAIRMAN

(continued from page 1)

Armed Services Committees in February, I said that the goal of military transformation is fostering changes that result in a dramatic improvement over time in the way combatant commanders wage war. First, we must acknowledge that such improvement requires more than new technology; it must involve change across the Armed Forces in areas such as doctrine, organization, training, people, and facilities. Second, it calls for a cultural change in our thinking and use of our capabilities to achieve more effective results. Third, military transformation requires improved interoperability, flexibility, and adaptability to support and achieve national security objectives in a dynamic international environment.

Having established the broad outline for the process of military transformation, the next step is determining how to achieve it. In the near term, we need to focus on improving joint linkages, fusing combat power, and eliminating gaps and seams among combatant commands, services, and supporting defense agencies. We must improve joint command, control, communications, com-

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to study past revolutions than to  
create or control new ones**

puters, intelligence, surveillance, and reconnaissance (C<sup>4</sup>ISR) capabilities to better connect all these entities in the battlespace. Finally, we need to synchronize and leverage ongoing service transformation through continuous joint experimentation under U.S. Joint Forces Command (JFCOM). I firmly believe that by integrating combat power and the core competencies of the services we will accelerate transformation and create the changes necessary to address an array of both current and future threats to national security.

The need for change is not new. History is replete with militaries that deliberately pursued new ideas, while in more recent years much has been written about a revolution in military affairs (RMA). *JFQ* alone has published over thirty articles on all aspects of the subject. Not surprisingly, it is much easier to study past revolutions than to create or control new ones. RMAs may result from deliberate actions taken by necessity, but rarely are their outcomes preordained. Prior to World War II, the Marines experimented with combined arms warfare for amphibious operations, the U.S. and Japanese navies developed carrier-based aviation, and the German army fielded combined arms



Joint direct attack munition on *USS Theodore Roosevelt*, *Enduring Freedom*.

forces—each illustrating a deliberate effort to transform military capabilities. The motivation to improve warfighting was provided by what each nation considered to be the challenge to its security. As dramatic as these examples are, none involved a linear process from the initial concept to full realization of enhanced military capabilities. The organizations involved had one thing in common: an institutional willingness to experiment and change. I am convinced that the deliberate steps we have taken to synchronize and support service and joint transformation will create that same mindset. I am also convinced that the joint experimentation process at JFCOM will have a central and sustaining role in military transformation.

Summer 2002 should provide a watershed for joint experimentation. JFCOM is working closely with the services, U.S. Space Command, U.S. Special Operations Command, and U.S. Transportation Command to combine several transformation initiatives in the largest joint field experiment ever conducted, Millennium Challenge '02 (MC 02). This experiment is designed to improve C<sup>4</sup>ISR by evaluating warfighting concepts and related



tactics, techniques, and procedures, and improve our ability to achieve rapid, decisive effects throughout the battlespace.

As a result of previous experimentation insights, current operational demands, and lessons learned, JFCOM has created a standing joint force headquarters. A central component of MC 02 and future experiments, this headquarters is part of an investigation into how to eliminate the ad hoc nature of current operations, improve joint interoperability, and enhance operational effectiveness. The insights gained from the experiment will be reflected in recommendations on doctrine, organization, training, leader development, and other areas that impact transformation.



Jumping near  
Ulan Batar, Mongolia.



353rd Special Operations Group (Michael Farris)

Experimentation is crucial, but it is not the only transformation path. Modernization and recapitalization also play a part. While sudden doctrinal, organizational, and technological breakthroughs are possible through experimentation and should be vigorously pursued, history suggests that there is also a linkage between transformation and incremental modernization of key

**the requirement to maintain readiness must be balanced with modernization investments and the need to accelerate transformational changes**

programs. The development of modern firepower is an example. There have been many small, deliberate steps to enhance weapon systems during the past century. These incremental improvements have led to three major transformational leaps in military effectiveness. The first was the development of weapons such as automatic small arms, machine guns, and tanks—coupled with development of both wire and wireless communications—which enabled operational and tactical commanders to mass both forces and firepower with unprecedented effect on the battlefield. Further developments in weapons, to include rockets, cruise and ballistic missiles, and nuclear weapons—linked by satellite and digital

communications technology—led to the second transformational leap, allowing commanders to mass firepower using dispersed forces.

Modernization efforts over the past thirty years are leading to a third transformational leap. We are already exploiting the potential of precision-guided munitions, using the global positioning system (GPS) to guide joint direct attack munitions (JDAMs) on targets with deadly accuracy. Thus we envision combatant commanders being able to achieve mass effects on an enemy without having to mass either forces or firepower.

On occasion, we can almost immediately foresee radically new military capabilities brought about by technological improvements in a modernization program (for example, with stealth technology). From concept to acquisition, planners envisioned the operational impact of stealth-capable aircraft defeating robust integrated air defense systems. This important advancement coupled with precision-guided munitions has dramatically improved joint warfighting capabilities.

But usually it is difficult to perceive the broader potential of technologies in the concept stage. More often it takes incremental development and refinement to realize their transformational qualities. GPS represents this latter type of change. Though an important development, its use to enable precise navigation in operations around the globe did not, by itself, dramatically improve warfighting. It took further development and companion technologies to synchronize the timing of fires and communications and the movement of forces, as well as to pinpoint the delivery of ordnance. These advances in combination have vastly improved joint warfighting capabilities.

Whether transformation comes in incremental steps or radical leaps, it does not occur in a vacuum. As the world changes, so do the threats. The standing requirement to maintain readiness for today's conflicts and potential adversaries must be balanced with modernization investments and the need to accelerate the introduction of transformational changes.

The global war on terrorism has spurred innovative thinking, which may in turn allow us to optimize many modernization programs—taking older systems in unforeseen directions. We have used so-called Cold War relics such as B-52s, designed for intercontinental strategic strikes, and P-3s, intended to hunt submarines, in novel ways. B-52s armed with JDAMs now provide close air support. P-3s, flown in tandem with Joint Stars and unmanned aerial vehicles, provide



U.S. and Afghan forces,  
Operation Anaconda.

real-time intelligence, reconnaissance, and targeting data to Army, Marine, and Special Operations Forces units. B-52s and P-3s are not, in and of themselves, transformational. But how they have come to be used does represent a transformation. Modernization and the innovative use of C<sup>4</sup>ISR have dramatically improved the way U.S. Central Command has been able to fight the war, including the shortening of sensor-to-shooter decision cycles through the use of real-time data collected from a web of sensors.

Recent combat operations in Afghanistan illustrate how modernization programs contribute to transformation and dramatically improved capabilities for combatant commanders. Continued modernization of complementary joint-capable systems and platforms and additional improvements in C<sup>4</sup>ISR and other emerging technologies is crucial. We seek greater operational flexibility through plug-and-play capabilities, quickly mixing and matching forces as conditions dictate. We seek further integration of warfighting systems and development of standing joint force headquarters for all combatant commands. Finally, we seek to experiment with new ideas

and capabilities to validate and explore other approaches to transformation.

I look forward to MC 02 and the work by the standing joint force headquarters to improve joint warfighting. These efforts will contribute greatly to transformation and better prepare us to face a complex array of threats. More importantly, I look forward to the ideas of the men and women in the Armed Forces, pursued on the frontlines of the global war on terrorism and through forums such as *Joint Force Quarterly*. Creativity is the fuel that will power innovation and improvements in joint warfighting and military transformation throughout the 21<sup>st</sup> century.

RICHARD B. MYERS  
Chairman  
of the Joint Chiefs of Staff